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CENTRAL FAX CENTER****JUL 19 2006****REMARKS**

The present Amendment amends claims 13 and 15 and leaves claims 14, 16 and 17 unchanged. Therefore, the present application has pending claims 13-17.

Claims 13-17 stand rejected under 35 USC §103(a) as being unpatentable over McTiffin (U.S. Patent No. 5,359,603) in view of Shimizu (U.S. Patent No. 5,452,296). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 13-17 are not taught or suggested by McTiffin or Shimizu whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to each of the claims so as to more clearly describe features of the present invention not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the features of the present invention as now more clearly recited in the claims are not taught or suggested by McTiffin or Shimizu whether taken individually or in combination with each other as suggested by the Examiner.

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Shimizu whether taken individually or in combination with each other as suggested by the Examiner.

Amendments were made to the claims so as to more clearly recite that the present invention is directed to a method of switching internet protocol (IP) packets at a packet switching system. Particularly, according to the present invention, a pair including an IP address and a port number and transmission control protocol (TCP) or user datagram protocol (UDP) are allocated to a virtual channel identifier (VCI) and IP packets whose headers have the IP address and the port number are output via a virtual connection (VC) corresponding to the VCI when the packet switching system receives the IP packets.

According to the present invention if the IP headers have a certain part identical with previously input packets, the allocated VCI is the same as a VCI allocated to the previously input IP packets and if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI.

Further, according to additional features of the present invention, the VC is included in a virtual path and the IP packets are transmitted, not according to the VCI, but according to a virtual path identifier (VPI) of the virtual path in an ATM network.

The above described additional features of the present invention regarding the virtual connection being included in a virtual path are described, for example, in the passage beginning on page 42, line 20 through page 43, line 12.

Thus, the present invention as now more clearly recited in the claims provides that a first IP packet is allocated a VCI and the next IP packet shares the same part of the header as the first IP packet such that the next IP packet included in subsequent packets is allocated the same VCI. Further, according to the present invention as more clearly recited in the claims, in the ATM network switching is performed based, not on the VCI, but on the virtual path identifier (VPI).

Accordingly, since the next packet is transferred based, not on the VCI, but on the VPI in the ATM network, the present invention makes it unnecessary to provide cut-through paths for each of the ATM routers/switches composing the ATM network.

The above described features of the present invention now more clearly recited are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention are not taught or suggested by McTiffin or Shimizu.

McTiffin teaches an asynchronous transmission mode (ATM) system which can be used with mobile terminals. As per McTiffin, the ATM system includes a mobile network interface unit connected to a network, a plurality of base stations connected to the network, and at least one mobile terminal arranged to communicate with the base stations over a radio link. The network is arranged to connect the mobile network interface unit and the base stations, wherein the connections are defined by a virtual path identifier. A unique virtual channel identifier is allocated at set up of a call or connection by the mobile network interface unit, for identifying a call or connection

associated with a mobile terminal being handled within an area controlled by the mobile network interface unit. The virtual channel identifier is placed in a virtual channel identifier field of ATM cell carrying user data associated with the call or connection.

Shimizu teaches an ATM communication system which attempts to minimize delays without requiring setting of the corresponding virtual connection (VC) table and routing. The ATM communication system as per Shimizu includes a vacant virtual connection table indicating unused VC. The VC is retrieved in response to a transmission demand and set in an ATM cell as a virtual connection ID (VCI). Then, the cell is transmitted with added address information identifying the destination. An ATM switch and a routing controller determine routing from a transmitting terminal to a receiving terminal. The determined routing is stored in a routing table in the routing controller. Then, through the determined routing, data is transferred from the transmitting terminal to the receiving terminal.

As is clear from the above both McTiffin and Shimizu are deficient of the features now recited in the claims. Particularly both McTiffin and Shimizu fail to teach or suggest that a pair including an IP address and a port number and transmission control protocol (TCP) or user datagram protocol (UDP) are allocated to a virtual channel identifier (VCI) and IP packets whose headers have the IP address and the port number are output via a virtual connection (VC) corresponding to the VCI when the packet switching system receives the IP packet as in the present invention.

Further, as is clear from the above both McTiffin and Shimizu fail to teach or suggest that if the IP headers have a certain part identical with

previously input packets, the allocated VCI is the same as a VCI allocated to the previously input IP packets and if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI as in the present invention. In addition both McTiffin and Shimizu fail to teach or suggest that the VC is included in a virtual path and the IP packets are transmitted, not according to the VCI, but according to a virtual path identifier (VPI) of the virtual path in an ATM network as in the present invention.

Thus, both McTiffin and Shimizu fail to teach or suggest allocating a pair including an IP address and a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) to a Virtual Channel Identifier (VCI) and outputting IP packets whose headers have the IP address and the port number via a Virtual Connection (VC) corresponding to the VCI when the packet switching system receives the IP packets as recited in the claims.

Further, both McTiffin and Shimizu fail to teach or suggest that if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and that if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI as recited in the claims.

Still further both McTiffin and Shimizu fail to teach or suggest that the VC is included in a Virtual Path, and the IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the Virtual Path in an ATM network as recited in the claims.

Therefore, both McTiffin and Shimizu suffer from the same deficiencies relative to the present invention as now recited in the claims and as such combining the teachings of McTiffin and Shimizu in the manner suggested by the Examiner in the Office Action still fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly reconsideration and withdraw of the 35 USC §103(a) rejection of claims 13-17 as being unpatentable over McTiffin and Shimizu is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 13-17.

In view of the foregoing amendments and remarks, applicants submit that claims 13-17 are in condition for allowance. Accordingly, early allowance of claims 13-17 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.36259CX1).

Respectfully submitted,

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